



Environmental Epidemiology and Toxicology

Indoor Air Quality - Fact Sheet

The Indoor Air Quality Program has increasingly been requested to handle indoor air complaints and conduct indoor air investigations. A reduction in funding for this activity would reduce the number of facilities that would be able to be assessed for indoor air quality contaminants. It would also reduce a timely response to potentially unsafe indoor environments. An increase in funding for this activity would increase the number of services being provided to Louisiana citizens (e.g. more facilities could be assessed, more calls taken in a timely fashion, more presentations to targeted communities)

Objective

The focus of the IAQP is to educate the citizens of Louisiana about the public health impact of poor indoor air quality and reduce their exposure to these pollutants. This can be accomplished through indoor air screenings, community presentations, phone consultations, and outreach.

Performance Indicators

1. Number of Tools for Schools presentations provided
2. Number of facility assessments performed
3. Number of IAQ phone consultations conducted
4. Number of IAQ informational packets mailed
5. Number of hits to the IAQ website

Narrative

People spend 90% of their time indoors (USEPA 2008). The quality of this environment is vitally important to the public's health. Since August of 2000, the IAQP has received and tracked over 5000 indoor air quality complaint calls from state residents. Callers to the IAQ hotline receive informational consultations that cover a variety of IAQ topics including: asbestos, formaldehyde, environmental tobacco smoke, biological and chemical contaminants, lead, particulates, pesticides, soot, volatile organic compounds, and mold. The highest percentage of calls (64%) is concerning the presence of mold. Many Louisiana buildings have been affected by age, lack of regular maintenance and the devastation of recent hurricanes. Indoor air quality complaint calls have significantly increased.

There is much concern regarding indoor air environments and how they affect human health. Providing information on indoor air quality contaminants (e.g. mold, formaldehyde, and foreign drywall) through telephone consultations, environmental educational material development, and targeted outreach (e.g. air quality in schools) is the focus of the IAQP. Frequently the callers are requesting, indoor air sampling and analysis. It is proposed that this new activity perform limited sampling and analysis in schools, child daycare centers, public buildings, and, perhaps, limited residential environments. The extent of residential sampling should be determined through other state IAQP's Best Practices.

Better Health

Environmental Epidemiology and Toxicology-Expanded Indoor Air Quality Program advances the State Outcome Goal of Better Health by reducing healthcare costs and/or improving quality of life for individuals through preventive measures that minimize the effects of disease. Poor indoor air quality contributes to the development of respiratory illness. For example, there exists within the indoor environment of most buildings, conditions which foster asthma triggers. Asthma triggers include pesticides, environmental tobacco smoke; body secretions, parts, and droppings from pests; mold; dust mites; and animal dander. These factors are common in many buildings and can cause, trigger or aggravate asthma symptoms. Elimination of the presence of asthma triggers can help to minimize the effects of the disease. The EPA: Tools for Schools program in Louisiana was selected to help reduce asthma triggers in buildings, because it addresses all of the areas of concern with a clear, organized, assessable plan of action that evaluates progress and assesses results. IAQP also combines the collection of pre- and post- intervention IAQ sampling data with the TfS program as a means of tracking the effectiveness of the intervention in each facility.

Environmental Epidemiology and Toxicology-Expanded Indoor Air Quality Program advances other State Outcome Goals:

1. Diversified Economic Development:

Improvements to the physical environment of Louisiana's buildings can be very costly. Facility managers are always in search of ways to minimize cost while still insuring that their facilities' environments are properly cleaned and well maintained. IAQP's use of the protocols and checklists in the TfS program promotes regular preventive maintenance of these facilities. It also assists in the prioritization of repairs for the best use of available funds; thereby removing the pressure to fix all facility maintenance issues immediately. Good indoor air quality can be achieved by keeping facilities in good working order.

2. Youth Education:

The IAQP helps to promote Grades K-12 and pre-K health education that gives students essential health information and problem solving skills. Well maintained school facilities with healthy indoor air are more conducive to learning (USEPA 2008). Currently the IAQP offers phone consultations to Louisiana residents, mails information, and provides lectures/presentations upon request. IAQ phone consultations have been tracked by IAQP since August of 2000 through a Complaint Form with daily data entry into an Access database. The SEET/IAQ Complaint database allows analysis of the calls by type, location, and resolution or referral action. Of all the IAQ complaints received by SEET's Telephone hotline 64% are mold related. Analysis of all mold complaint data shows that 86% of those phone calls involve Louisiana's schools.

As mandated in Louisiana Revised Statutes (RS) 36:258, requires the IAQP to perform functions which will improve the quality of life by protecting the general public's health. IAQP is further required to ensure the state's environmental quality and effective control of pollution (RS 40:5) which are related to the public's health. EPA's Strategic Plan 2006-2011 has as objective 1.2 Healthier Indoor Air. It states "Through 2012, working with partners, (to) reduce human health risks by reducing exposure to indoor air contaminants through the promotion of voluntary actions by the public."¹ According to the 2006 BRFSS Optional Childhood Asthma Module, 12% (115,979) of Louisiana homes have asthmatic children living in them.

Funding Source: State General Fund

Routine activities (annual average):

- IAQ phone consultations -734
- IAQ drywall phone consultations– 910 to date
- Number of presentation per year (e.g. community organization, nonprofits) 5
- Number of individuals reached -1506
- Facility assessments (schools, public buildings, child daycare centers) 9
- IAQ informational packets provided – 259
- Informational inquiries to IAQ website- 1469
- Number of - 608

¹ EPA's Clean Air Act Strategic Plan for IAQ